

Protective effects of apricot against ketamin induced hepatotoxicity in rats

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Abstract: The apricot is an important nutritional fruit in regard to its content of mineral and vitamins. It is well-known the beneficial effects of the apricot on gastrointestinal, cardio-vascular, nervous and musculoskeletal system. The aim of this study was to evaluate the hepato-protective effects of the dietary apricot in rats induced by ketamine toxicity in regard to biochemical, histopathological and immunohistochemical examinations.

Material and Methods: In this study; twenty eight, male, 12 week old, Sprague Dawley rats were divided into 4 groups, 7 rats in each. Group I: control group. Group II: rats were injected intraperitoneally with ketamine (100 mg/kg/day) for two weeks. Group III: rats received 5% apricot containing diet for 15 days. Group IV: rats received 5% apricot containing diet and intraperitoneally injected ketamine (100 mg/kg/day) for 15 days. Serum levels of AST, ALT, ALP, GGT, TB, ALB levels were measured. Histological Liver sections were subjected to H & E, immunohistochemical stain (Caspase 3) and followed by statistical analysis. In group II; liver enzymes and immunohistochemical caspase-3 positivity were significantly increased as compared to control. Furthermore, there was hepatocytic vacuolar degeneration, focal necrosis and sinusoidal hyperemia. These lesions were less severe in group IV, whereas caspase immunoreactivity were less significant in group IV.

Results: Overall, apricot containing diet has hepatoprotective effects on ketamine toxicity in rats.

Biography:

I was born in Malatya province of Turkey in 1965. In 1987, I've finished University of Firat, Faculty of Veterinary Medicine, and finished Ph.D University of Selcuk, Health Sciences Institute in 2007. From February 2009, I've been working University of Inonu, Faculty of Pharmacy, Department of Pharmacology as Assistant Professor Dr.